PHASE 2
FIELD CONSTRUCTION PLAN
FOR 2008 CONSTRUCTION SEASON

RICHARDSON FLAT TAILINGS SITE

EPA SITE ID: UT980952840

September 23, 2008

Prepared for:

United Park City Mines
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1.0 INTRODUCTION

This Field Construction Plan (FCP) details the construction components, stormwater management and procedures and completion milestones to be undertaken for the 2008 construction season. Elements to be constructed during the 2008 construction season consist of Tasks 2, 3, 4 and 9 of the Remedial Design and Remedial Action at Richardson Flat. Task 2, 3, 4 and 9 areas are presented in Figure 1-1. The tasks are required to complete the selected remedy approved by the United States Environmental Protection Agency (EPA) at the Richardson Flat Tailings Site, Site ID UT980952840, (The "Site") near Park City, Utah.

This is the second FCP submitted to EPA. The FCP for Task 1 was submitted to EPA and approved on July 16, 2008. The Task Completion Report (TCR) for Task 1 was approved by EPA on July 16, 2008. Task 1 consisted of the first of four phases of construction at Richardson Flat as outlined on Figure 10.2 of the RD/RA. Each phase consists of individual tasks to be completed in single construction season. The work outlined in this FCP represents the second of four phases of construction.

A full description of Site background, investigative history, specifications, health and safety, design elements, project management and construction procedures are presented in the Remedial Design and Remedial Action Work Plan (RD/RA, RMC 2007a). This FCP is intended to act as a planning supplement to the RD/RA with a focus on stormwater runoff protection and actual remediation related construction to take place in the field.

Work to be performed during the 2008 construction season:

Task 2:

- Source removal, grading, confirmation sampling, topsoil placement, channel reconstruction and revegetation in area B-2-E (Figure 1-1).

- Wetland construction in area B-2-E. Wetland construction will provide additional wetland habitat and compensation for potential Natural Resource injuries.

Task 3

- Source removal, grading, confirmation sampling, topsoil placement, channel reconstruction and revegetation in area B-3-E (Figure 1-1).
- Wetland construction in area B-3-E. Wetland construction will provide additional wetland habitat and compensation for potential Natural Resource injuries.

Task 4

- Sediment removal, grading, confirmation sampling, topsoil placement, erosion material/structures placement and revegetation of the east portion of the South Diversion Ditch (Figure 1-1) upstream from the current culvert crossing.
- Additional wetland construction along the periphery of the SDD. Wetland construction will provide additional wetland habitat and compensation for potential Natural Resource injuries.

Task 9

- The seasonally wet area located in the northern portion of the Impoundment (Figure 1—1) will be covered with additional cover to bring the amount of cover to a minimum of 18". The area may be surrounded by a swale to direct and control the amount of runoff received.

- When restored this area will be used to help with any necessary compensation for potential Natural Resource injuries.

1.1 Remedy Description and Overview

The remedy is specified in the Record of Decision (ROD) and detailed in the RD/RA. The selected remedial alternative contains the following elements related to Task 2 areas:

- Source removal will consist of the excavation of contaminated materials in selected areas south of the South Diversion Ditch (referred to as Area B). Excavation would extend to the visual interface between the tailings and native soils in low lying areas subject to seasonal ponding or interaction with shallow groundwater, or to a depth where a clay soil cover can be placed;
- Placement of a minimum twelve inches of low permeability soil cover on areas where cover is required. The cover will be machine compacted. Upon completion of the low permeability soil cover, a six-inch topsoil cover will be placed. The final surface cover will be a minimum of eighteen inches thick and the surface will be graded to control surface stormwater runoff and drainage;
- Placement of topsoil to facilitate vegetative growth in areas where tailings are completely removed;
- Placing excavated materials in the impoundment. The impoundment will be used by United Park and others to accommodate similar Bevill-exempt mine waste materials in the upper Silver Creek watershed;
- Regrading and revegetation of areas affected by remedial activities at the Site. Areas in which tailings were removed would be restored, where possible, to existing topographic conditions; and
- Monitoring Site conditions will be conducted as described in the Operations and Maintenance Plan found in Appendix F of the RD/RA Work Plan. The Operations and Maintenance plan is consistent with the RD/RA Consent Decree and Statement of Work. Surface water and general site conditions will be monitored consistent with those documents.

All cover and topsoil placed in upland areas containing less than 500 parts per million (ppm) lead and 100 ppm arsenic will be classified as clean. All cover and topsoil placed in wetland areas, including the South Diversion Ditch, containing less than 310 ppm lead will be considered clean.

2.0 WORK PROCEDURES

Work will be conducted according to specifications presented in Section 6.0 of the RD/RA.

The work procedures presented in this section will be field fit as necessary to provide flexibility needed to implement the ROD in areas that were originally not identified as a source area for surface water contamination. Any additional work deemed necessary to complete the overall objectives of the project will be performed during construction.

2.1 B-2-E and B-3-E

Work activities in areas B-2-E and B-3-E (Figure 1-1) will consist of source removal, placement and grading of low permeability cover soil, where required, and topsoil, and channel reconstruction as specified in Section 6.0 of the RD/RA. The area will be revegetated after source removal and placement of the soil cover is complete.

1) If needed, excavation and construction areas will be cleared and grubbed prior to the placement of materials. Clearing and grubbing will include the removal of organic matter such as plants, trees and woody material, as well as any other material from the Site. Large non-organic materials such as boulders that interfere with grading will be removed from the areas as required.

2) Appropriate dust control will be conducted during all excavation, soil placement and transport and grading activities.

3) Air monitoring will be conducted during earthmoving activities. If required, additional air monitoring locations and/or additional BMPs will be established to reduce the offsite migration of contaminants. Air monitoring will be conducted

according to procedures outlined in Section 11.1.1 or the RD/RA and Section 4.4.5 of the FSP.

4) Tailings will be excavated from low-lying areas subject to seasonal ponding or interaction with shallow groundwater. Excavation will extend to the visual interface between the tailings and native soils or to a depth where a clay soil cover can be placed. Cover soil details are presented in Figure 2-1. Tailings excavation will be guided using a field portable X-ray Fluorescence Meter (XRF). Excavation and transport will be staged in a manner to avoid the re-contamination of clean areas.

5) Where mine waste is transported to and placed in the Impoundment, the material will be graded to conform to general site topography prior to the placement of cover soils.

6) Surfaces and subgrades will be graded to approximate final configurations and shapes prior to cover and topsoil placement. Subgrades and final graded surfaces will be confirmed by conventional survey techniques where applicable.

7) Imported soils will be screened with the XRF. A five sub-sample composite will be collected for every 5,000 cyds and screened with the XRF. Five-percent of the composite samples will be submitted to the laboratory to confirm XRF results. All cover and topsoil placed on-site will be clean as described in Section 1.1. Sampling protocol and analytical methodologies are described in the Field Sampling Plan (FSP, RMC, 2007b).

8) Cover soils will be low permeability, high clay content soils typical of those found in the region. Large rock material will be avoided. Clay rich soils located on-site will be used as cover material using the same criteria outlined in Section 6.1 of the RD/RA for quality control.

9) Cover soils will be compacted with tracked or equivalent equipment. Compaction methods also may include rolling and/or vibrating, as necessary. Cover soils will be

inspected and approved by United Park or its representatives prior to topsoil placement.

10) The final cover subgrade surface will be uniform to allow for the placement of a consistent topsoil layer.

Note: Items 11 through 13 are referred to as General Topsoil Procedures.

11) Final surfaces, grades and erosion control structures will not be considered complete until approved by United Park or its representative.

12) Topsoil will be screened to remove particles greater than six inches and will be suitable to support vegetation. Topsoil will placed to a minimum depth of six inches and will contain sufficient organic matter and nutrients to ensure that revegetation efforts are successful.

13) The seedbed will consist of topsoil placed during remedial activities. Topsoil will be lightly compacted and scarified as necessary. The seedbed will be roughened prior to seeding.

14) Wetland construction will consist of additional grading and the construction of habitat features. Areas may be excavated into the shallow water table to provide additional aquatic habitat.

15) Revegetation will be conducted on all graded areas and areas receiving topsoil.

16) The upland seed mix will include a mixture of deep-rooted annual and perennial native grass and forb species. The annual species will provide rapid germination to aid in short term revegetation. The short-term revegetation will decrease the runoff potential of the slope and will keep the imported soil in place. Perennial species will provide longer term, more stable revegetation. Wetland areas will be revegetated

with wetland specific species. Appendix C of the RD/RA contains the seed specifications for the Site.

17) Completion confirmation sampling is detailed in Section 4.0.

18) Ephemeral channels, as required, will be reconstructed in accordance with the specifications presented in Section 6.6 and Figure 5-3 of the RD/RA. Channel details are presented in Figure 2-1.

2.2 South Diversion Ditch

Work activities will include

1. If needed, excavation and construction areas will be cleared and grubbed prior to construction activities. Clearing and grubbing will include the removal of organic matter such as plants, trees and woody material, as well as any other material from the Site. Large non-organic materials such as boulders that interfere with grading will be removed from the areas as required.

2. Appropriate dust control will be conducted during all excavation, soil placement and transport and grading activities.

3. Air monitoring will be conducted during earthmoving activities. If required, additional air monitoring locations and/or additional BMPs will be established to reduce the offsite migration of contaminants. Air monitoring will be conducted according to procedures outlined in Section 11.1.1 or the RD/RA and Section 4.4.5 of the FSP.

4. Flow barriers will be placed up and down stream from ditch construction areas to isolate the work area. A pump will be used to bypass flows around the work area. The pump will also be used to fill water trucks used for dust control purposes.

5. Contaminated sediments in the bottom of the Diversion Ditch will be removed and transported to the impoundment. The ditch will be considered clean when sediment lead concentrations are below 310 ppm. Sediment excavation will be guided using a field portable X-ray Fluorescence Meter (XRF) where possible. Sediments may be dried overnight prior to XRF screening. Excavation and transport will be staged in a manner to avoid the re-contamination of clean areas;

6. Areas of the Ditch containing sediments exceeding 310 ppm lead at depths impracticable to excavate will be covered with clean clay soils.

7. Areas of the Diversion Ditch have been constructed in tailings. Tailings in contact with water in these areas will be excavated. Areas of tailings not in contact with tailings will be covered with low permeability soil.

8. Over excavation on the periphery of the SDD will be conducted to increase wetland habitat. Overexcavation will be field fit to conform to work completed during Task 1 activities including the Park and Ride construction.

9. The channel and adjacent wetland areas will be graded and configured to optimize flow and retention in wetland areas.

10. Clean soils or other media will be placed in the bottom of the channel and adjacent wetland areas as needed to promote the growth of wetland vegetation.

11. The final surface will be uniform to allow for the placement of a consistent topsoil and/or growth media layer.

12. Topsoil will be placed in accordance with General Topsoil Procedures specified in Section 2.1.

13. Revegetation will be conducted on all graded areas and areas receiving topsoil.

14. The seed mix will include a mixture of deep-rooted annual and perennial native grass and forb species. The annual species will provide rapid germination to aid in short term revegetation. The short-term revegetation will decrease the runoff potential of the slope and will keep the imported soil in place. The perennial species will provide longer term, more stable revegetation. Wetland areas will be revegetated with wetland specific species. Appendix C of the RD/RA contains the seed specifications for the Site.

15. Completion confirmation sampling is detailed in Section 4.0.

2.3 Area F-8

Work activities in area F-8 (Figure 1-1) will consist of the placement and grading of low permeability cover soil and topsoil as specified in Section 6.0 of the RD/RA. The area will be revegetated after placement of the soil cover is complete.

1) If needed, excavation and construction areas will be cleared and grubbed prior to the placement of materials. Clearing and grubbing will include the removal of organic matter such as plants, trees and woody material, as well as any other material from the Site. Large non-organic materials such as boulders that interfere with grading will be removed from the areas as required.

2) Appropriate dust control will be conducted during all construction activities.

3) Air monitoring will be conducted during earthmoving activities. If required, additional air monitoring locations and/or additional BMPs will be established to reduce the offsite migration of contaminants. Air monitoring will be conducted according to procedures outlined in Section 11.1.1 or the RD/RA and Section 4.4.5 of the FSP.

4) Surfaces and subgrades may be graded to approximate final configurations and shapes prior to cover and topsoil placement. Subgrades and final graded surfaces will be confirmed by conventional survey techniques where applicable.

5) Imported soils used in the covering process will be screened with the XRF. In addition a five sub-sample composite will be collected for every 5,000 cyds and submitted to the laboratory for lead and arsenic analysis. All cover and topsoil placed on-site will be clean as described in Section 1.1. Sampling protocol and analytical methodologies are described in the Field Sampling Plan (FSP, RMC, 2007b). A portable XRF will be used in the field to prevent cross-contamination.

6) Cover soils will be low permeability, high clay content soils typical of those found in the region, large rock material will be avoided. Clay rich soils located on-site will be used as cover material using the same criteria outlined in Section 6.1 of the RD/RA for quality control.

7) Habitat islands and features constructed out of soil containing less than 310 ppm lead.

8) Cover soils will be will be compacted with tracked or equivalent equipment. Compaction methods also may include rolling and/or vibrating, as necessary. Cover soils will be inspected and approved by United Park or its representatives prior to topsoil placement. Cover soils will be clean as described in Section 1.1. A portable XRF will be used in the field to prevent cross contamination.

9) The final cover subgrade surface will be uniform to allow for the placement of a consistent topsoil layer.

10) Topsoil will be placed in accordance with General Topsoil Procedures specified in Section 2.1.

11) Revegetation will be conducted on all graded areas and areas receiving topsoil.

12) The upland seed mix will include a mixture of deep-rooted annual and perennial native grass and forb species. The annual species will provide rapid germination to aid in short term revegetation. The short-term revegetation will decrease the runoff potential of the slope and will keep the imported soil in place. The perennial species will provide longer term, more stable revegetation. Wetland areas will be revegetated with wetland specific species. Appendix C of the RD/RA contains the seed specifications for the Site.

13) Completion confirmation sampling is detailed in Section 4.0.

3.0 STORMWATER MANAGEMENT

Stormwater management will be conducted to:

- Reduce the potential for offsite migration of sediments, soil and tailings; and
- Eliminate the re-contamination of areas that have been covered or have undergone source removal.

General stormwater management elements include:

- Berms, wattle and/or silt fencing as required to prevent the migration of materials from work areas;
- Sediment barriers in the South Diversion Ditch, pond and wetland to capture sediment and prevent downstream off-site migration. These in-flow barriers may include a combination of filter fabric, drop structures and/or temporary retention structures;
- Hay or straw bale barriers will be placed in appropriate ephemeral channel features that drain from work areas. The hay bales will be placed downgradient from the silt fence or wattle barrier;
- A supply of hay or straw bales and wattle material will be stored onsite during construction; and

- Stormwater runoff protection measures will remain in-place until revegetation efforts are complete.

General procedures to reduce the tracking of contaminated materials into un-contaminated areas will include:

- All trucks and equipment working in contaminated materials (e.g. tailings and sediments) will be decontaminated prior to working with clean materials. Decontamination procedures are described in Section 11.8 of the RD/RA;
- A stabilized construction entrance will be used, if necessary, to remove gross contamination for trucks hauling tailings;
- All trucks and equipment will be decontaminated prior to leaving the site; and
- Dust control will be conducted as necessary as described in Section 11.1.1 of the RD/RA.

Specific stormwater runoff protection elements to be implemented prior to and during construction will include:

- Silt fence or wattle will be placed along the downgradient side of excavation areas as required. The silt fence or wattle will prevent the migration of tailings and soils from the work zones. The silt fence or wattle will remain in place until revegetation efforts are complete;
- The raised elevation of the county road will prevent the migration of soil and tailings from the impoundment area to the south;
- The reconstructed pond south of the county road in B-2-E will act as a sediment detention pond for all work south of the county road. Sediments entering the pond will not be contaminated;
- Hay bale barriers will be placed in ephemeral channels that drain from the work zone. The hay bales will be placed downgradient from the silt fence or wattle barrier; and
- Sediment barriers will be placed as needed at the culvert crossing and the downstream end of the South Diversion Ditch directly above the pond. This barrier will prevent

the downstream migration of any sediment that has inadvertently migrated into the South Diversion Ditch and will remain in-place for the duration of the Remedial Action.

4.0 COMPLETION CONFIRMATION

Completion of work will based upon confirmation that the following Completion Milestones are complete:

1) Source removal in areas B-2-E, B-3-E and the SDD are complete;
2) Cover placement in F-8 is complete;
3) Confirmation samples have been collected and verify source removal and cover soil quality;
4) Channel reconstruction and topsoil placement are complete; and
5) Reclamation (surface grading drainage control and revegetation) is complete.

4.1 Source Removal Confirmation

Source removal will be confirmed using two methodologies:

1) Source removal will be confirmed with the XRF concurrently with removal.

2) Confirmation samples in areas B-2-E and B-3-E will be collected on a grid located on 200-foot centers and analyzed with the XRF. Confirmation samples will be collected using procedures and analytical methods detailed in the FSP (RMC, 2007b). Five-percent of all confirmation samples will be submitted to the laboratory to confirm XRF results. Sample locations are presented on Figure 4-1.

4.2 Cover Placement Confirmation

Cover placement will be confirmed using two methodologies:

1) Imported cover soils will be screened with the XRF. A five sub-sample composite sample will be collected for every 5,000 cyds and screened with the XRF. Five-percent of the composite samples will be submitted to the laboratory to confirm XRF results. All upland cover and topsoil will contain less than 500 ppm lead and 100 ppm arsenic. All wetland restoration area cover and topsoil will contain less than 310 ppm lead. Sampling protocol and analytical methodologies are described in the Field Sampling Plan (FSP, RMC, 2007b).

2) Following cover placement the thickness of clean cover will be measured. If necessary, a hand-coring tool will be used to measure thickness with minimal disruption to the cover. Cover thickness confirmation data will be collected on a grid located on 200-foot centers. If cover thickness is insufficient, additional sampling and cover placement will be conducted. Sampling protocol and analytical methodologies are described in the FSP (RMC, 2007b). Sample locations are presented on Figure 4.1.

4.3 Channel Construction Confirmation

All Channels will be visually inspected to ascertain that construction is complete. Conventional Survey methods will be used if required.

4.4 SDD Sediment Removal Confirmation

1) Sediment excavation will be guided using a field portable X-ray Fluorescence Meter (XRF)

2) Sediment confirmation sampling will be conducted every 200 feet of ditch length remediated. Ditch sediment sampling protocol and analytical methodologies will be in accordance with wetland sampling as described in the FSP (RMC, 2007b).

5.0 DELIVERABLES

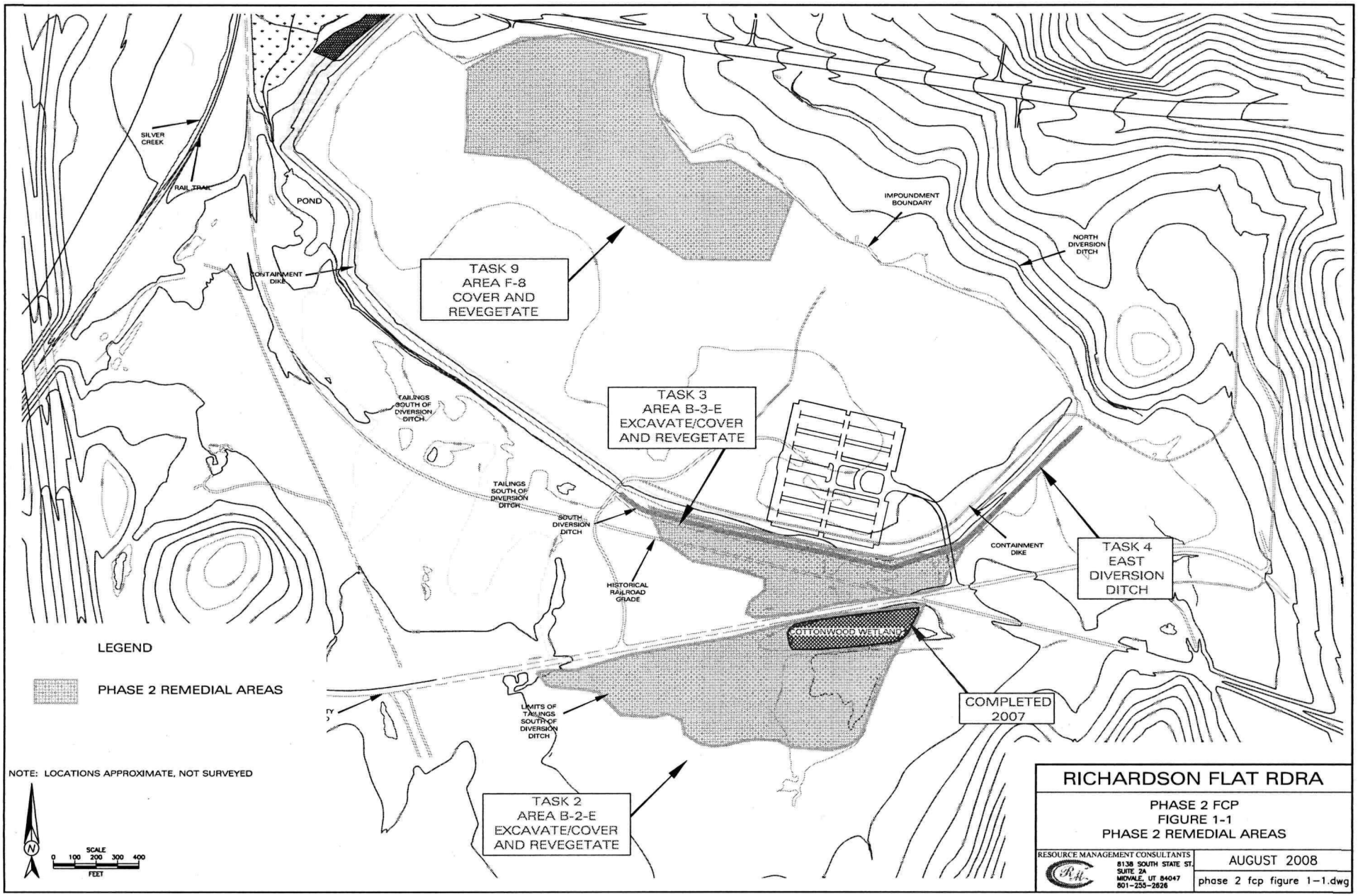
A Task Completion Report (TCR) will be prepared. The TCR will be provided to the EPA Remedial Project Manager following the completion of the remediation task. The TCR will contain a detailed description of the work completed and will include results of any sampling efforts undertaken.

6.0 REFERENCES

Resource Management Consultants, Inc (RMC), 2007a, Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840, With Attached Work Plan.

Resource Management Consultants, Inc (RMC), 2007b, Field Sampling Plan, Remedial Investigation, Richardson Flat, Site ID Number: UT980952840, With Attached Work Plan.

Resource Management Consultants, Inc (RMC), 2007c, Health and Safety Policy, Remedial Investigation, Richardson Flat, Site ID Number: UT980952840, With Attached Work Plan.



RICHARDSON FLAT RDRA

PHASE 2 FCP
FIGURE 1-1
PHASE 2 REMEDIAL AREAS

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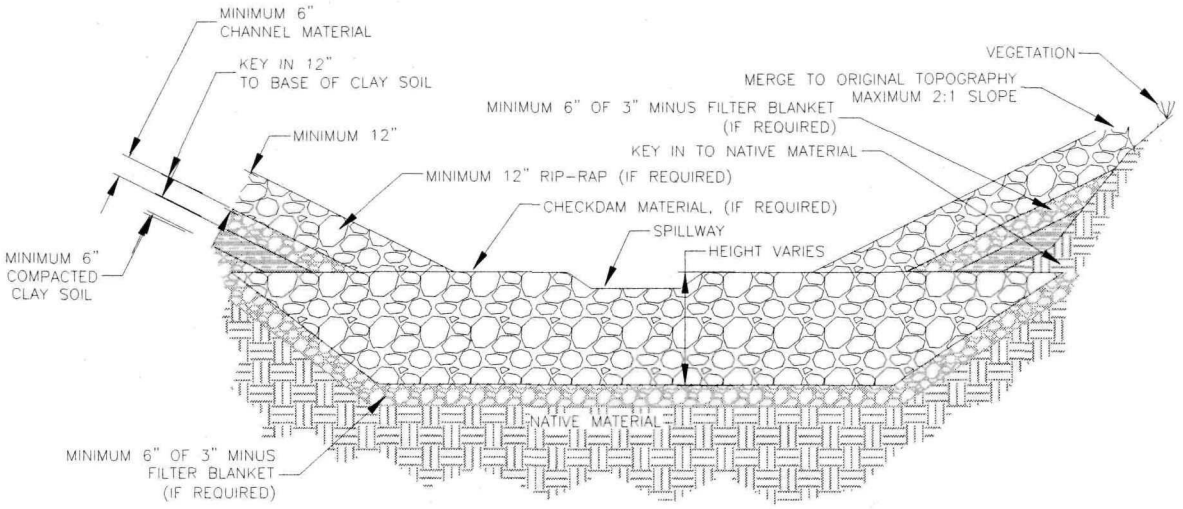
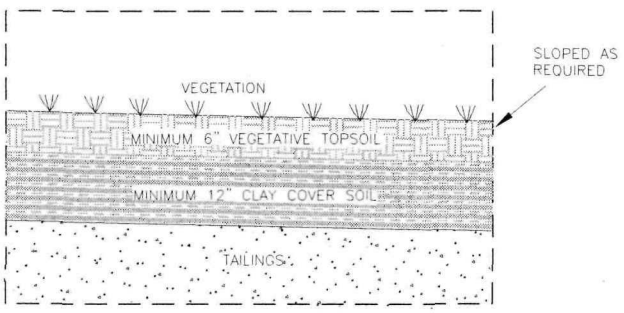
AUGUST 2008

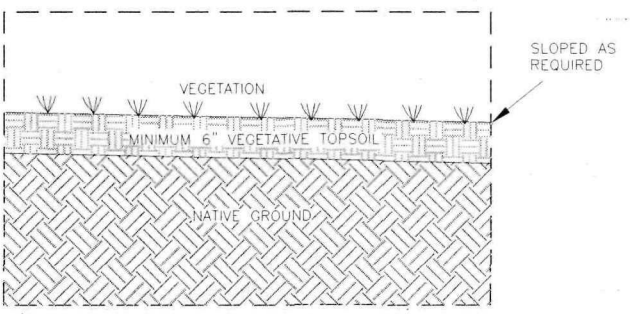
phase 2 fcp figure 1-1.dwg



CHANNEL CONSTRUCTION TYPICAL DETAILS



COVER SOIL
TYPICAL DETAILS



TOPSOIL
TYPICAL DETAILS

NOT TO SCALE

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TASK 2 FCP
FIGURE 2-1
CHANNEL AND SOIL COVER TYPICALS

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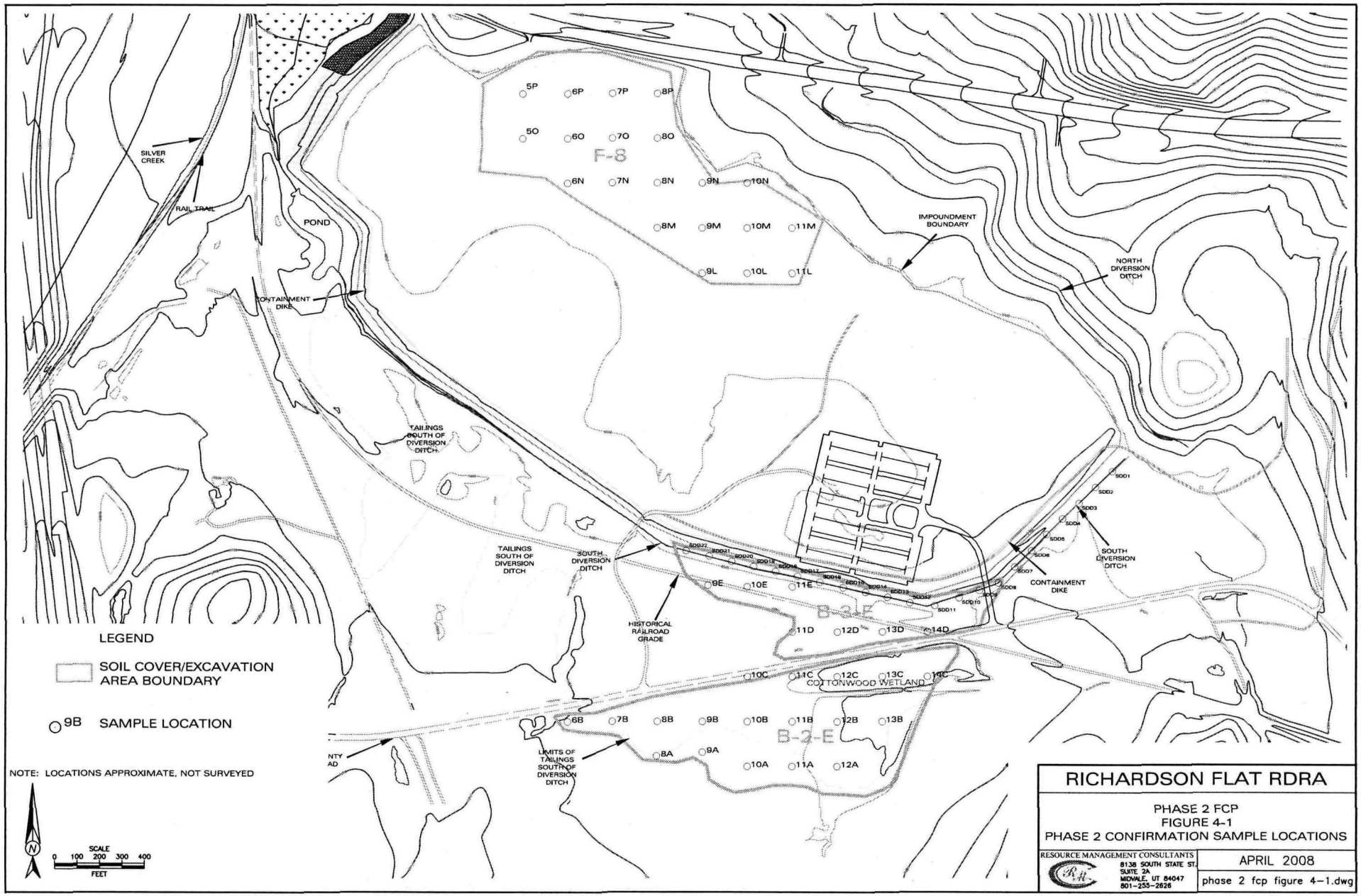
SEPTEMBER 2008

task 2 fcp fig 2-1.dwg



RICHARDSON FLAT RDRA

PHASE 2 FCP
FIGURE 4-1
PHASE 2 CONFIRMATION SAMPLE LOCATIONS

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APRIL 2008

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